DoD Comments to NRC Committee on Improvements to EPA Risk Analysis

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DoD: A User of EPA Risk Analysis

- EPA risk analysis programs has significant impacts on DoD's mission and resources
- Important that EPA risk analysis process be scientifically sound, understandable and clear
- We perceive the Committee's task to be focused on EPA's application of the Red Book
  - Not revisiting the entire risk analysis paradigm
  - Red Book's risk paradigm is used by multiple federal agencies for multiple purposes.

DoD Expertise in Risk Analysis

- Program
  - Military Exposure Guidelines (MEGs)
  - Chemical Weapons Material (CWM)
  - Acute Exposure Guideline Levels (AEGLs)
  - Emergency Exposure Guidance Levels (EEGLs)
  - Deployment Health: Environmental Health Site Assessment
  - Medical Threat Assessment
  - Weapons and Explosives Substances Review Board
  - Acquisition Health Hazard Assessments
  - Ecological Threshold Reference Values (TRVs)
  - Evaluating New Weapons Systems, Platforms and Equipment
  - Toxicological Safety Evaluations
  - Microbial Risk Assessments
  - Composite Risk Management
- Chemical
  - PBPK Modeling

Questions for the Committee to Reflect Upon

- How can uncertainty in risk assessments be more effectively communicated to users and the public?
  - Decision-makers must understand what drove the assumptions so that they can make appropriate decisions.
  - As we learn more about mechanisms of action and use modern methodology advancements, how should uncertainty factors be addressed, such as when precursor events are used?

- Risk range and central estimate
  - What is the proper role of various point estimates of risk in risk management decision-making?

In Summary…

- As health and environmental risk assessors, the DoD welcomes NAS's review of the application of the Red Book's conceptual framework to the EPA risk assessment paradigm.
- DoD offers our knowledge and expertise to assist the Committee in their charge.
- DoD requests that the Committee provide recommendations for developing scientifically sound, understandable and clear risk assessments and for communicating uncertainty to risk managers and the public.